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TRANSFORMATIONS OF THE CLASSIC PEDIMENT IN ROMANESQUE ARCHITECTURE

ROMAN architecture, both colonial and metropolitan, shows two fundamental types of construction. In the first, inherited from Greece, the walls are built of large cut stones laid without mortar. All ornamentation is fashioned in the stone itself and forms an integral part of the building. This is the type of construction

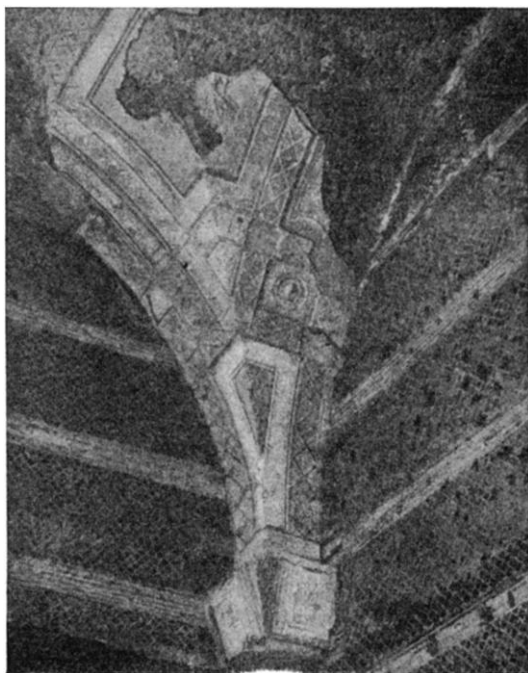


FIGURE 1.—OPUS RETICULATUM WITH HORIZONTAL BANDS OF BRICKWORK:
HADRIAN'S VILLA, TIVOLI.

used in the earlier temples, the amphitheatres, triumphal arches, etc. In the second, introduced at a later period, the walls are built of brick and small stones laid in thick beds of cement (Fig. 1.). Frequently the heart of the wall consists entirely of

concrete. After this construction has been finished it is overlaid with stucco, marble veneer, mosaics, applied orders of stone and marble, and so forth. Such walls are found in the Imperial palaces, basilicae, baths, and most other large buildings of the Imperial period.

In the late Imperial times, especially in the colonies, the marble or stucco veneer was sometimes omitted, the brick and small stones of the wall, arranged in patterns as in the *opus reticulatum*, providing a surface decoration of considerable variety and richness.¹

Both types of construction are found in Gallo-Roman architecture. In Provence where building stone of unusually fine quality abounds and where the influence of the original Greek settlers never quite disappeared, the construction is almost exclusively of stone. This is true to a less absolute degree further north, in Gallia Lugdunensis, but to the west of the Loire where good building stone is scarce, brick or brick and small stones in combination were in Gallo-Roman times as at the present day the favorite building materials.

The importance of this difference in materials is great. In Provence fine examples of the best Roman architecture stood throughout the middle ages and are still standing, with their decoration intact even to delicate details, while with the other type of construction the decorative veneer, quickly falling away or being removed to adorn new buildings, left only a memory and a tradition of its original form. The result was that Provençal architects and sculptors, with classic models always before their eyes, could not greatly misuse the classic motives. The pediment is employed there with such correctness and refinement, even in the twelfth century, that at first glance it would seem an

¹ This treatment became highly developed in the Eastern Empire. Cf. the so-called palace of Constantine IV Porphyrogenitus, of the tenth century. The use of diagonal stone work, known as *opus reticulatum*, was general under Trajan and Hadrian. It seems to have been abandoned, at least in Rome, by the end of the second century (Cf. Lanciani, *Ruins and Excavations of Ancient Rome*, pp. 44-45). At Pompeii there are many instances of *opus reticulatum* carefully laid in courses of slightly different colored tufas, particularly in the lunettes filling the spaces between lintels and their relieving arches. They were almost certainly not intended to be seen, but were to be covered with plaster. A splendid example of polychrome *opus reticulatum* manifestly used for decorative effect is, however, to be found in the first century aqueduct of Minturnae. (Cf. H. C. Butler, *A. J. A. V.* 1901, pp. 187-192; figs. C, 1, 2 and 3.)

antique fragment replaced on a Romanesque church.¹ But elsewhere in France, there being no actual remains of classic decorative forms to preserve the original significance of the pediment, it quickly becomes a mere decorative tradition wholly without structural significance, and changes from generation to generation and from place to place until the last descendant bears no resemblance to the parent form.

The classic pediment in its origin marks the gable end of a rectangular building. But in Imperial Roman architecture it was used to mark any entrance whatever and then was quickly adapted at small scale to form niches or tabernacles for the decoration of interior or exterior walls. As a relief from the monotony of a series of triangular pediments, the curved pediment was in-



FIGURE 2.—CHRISTIAN SARCOPHAGUS: LATERAN MUSEUM, ROME.

vented. Here the two original roof slopes were replaced by the continuous arc of a circle. This form could never have been used to any extent as an actual gable end, but as a wall decoration alternating with angular pediments it became the established rule.

In the decoration of late imperial sarcophagi the pediment often shows a further change. The horizontal cornice is omitted, leaving only the roof cornices, alternately angular and curved, on supporting columns. The series of tabernacles thus formed resembles a series of niches with angular or segmental tops (Fig. 2).²

¹ Revoil, *Architecture Romane*, I, Appendix, has been led by the correctness with which Roman forms and workmanship are reproduced, to assign many of the monuments which he publishes to much too early a date. Cf. Lasteyrie, *Architecture Religieuse en France à l'époque romane*, pp. 411 ff.

² Similar details on a Merovingian carving were found in the excavations of the church of St. Pierre at Metz, illustrated in Lasteyrie, *op. cit.* fig. 33.

In Provence the pediment never degenerates further than this because of the standard set by the classic Roman monuments. But west of the Cévennes we find practically no remains of decoration of the Gallo-Roman period, though there are many fragments of the undecorated substructure. The earliest monument for comparison with the late Roman work is the baptistry of St. Jean at Poitiers, assigned variously to the sixth and seventh centuries, but certainly belonging to the Merovingian period (Fig. 3).¹

The forms here are already very degenerate and the carved ornament is scarcely more than surface scratching, but the tradition of Gallo-Roman art is fully evident. On the outside wall is a

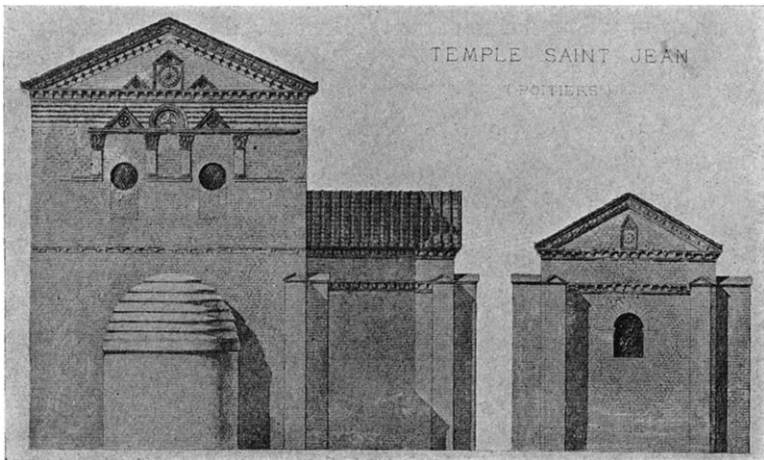


FIGURE 3.—ST. JEAN DE POITIERS: SIDE AND REAR ELEVATION.

series consisting of two triangular pediments with a curved one between supported on deformed and somewhat dislocated pilasters; on the inside the sequence of the pediments is reversed to fit better the two arched windows, and for the same reason the horizontal cornice is here removed. The relation between the decoration on the outside and that on the inside is peculiar; the bases of the exterior pilasters being at the level of the spring of the interior arch pediments, and consequently at the top of the interior capitals. In the gable outside is a rudimentary central tabernacle with

¹ Shown before restoration by Gailhabaud, *Monuments Anciens et Modernes*, Vol. II, text and six plates; and in its present condition in the *Archives de la Commission des Monuments Historiques*, II, pl. 1.

a triangular pediment, flanked by two others reduced to such diagrammatic expression that only the pediments remain. The gable as a whole has still a proper pedimental form, the horizontal and raking cornices being supported by a series of little blocks cut in crude imitation of the modillions of the Corinthian cornice. It should also be noticed that above the windows in the side wall,

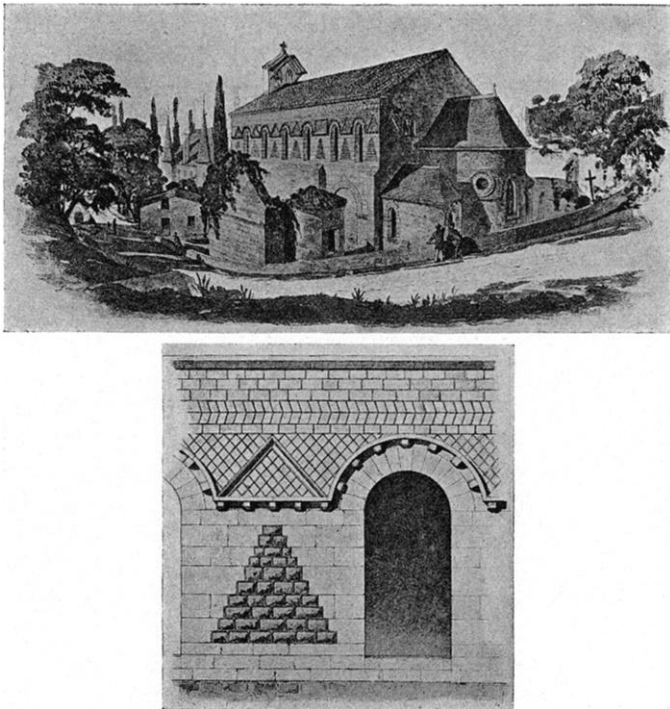


FIGURE 4.—ST. GÉNÉROUT: GENERAL VIEW AND DETAIL OF LATERAL FAÇADE.

rows of brick alternate with small courses of stone for greater decorative effect, and that in the gable there are inlays of stone and terra-cotta. The apse is rectangular and is surmounted on its rear face by another proper classic pediment within which is again a rudimentary tabernacle consisting of a rectangle bearing a triangle.

The next milestone in the pediment's progress is the church of St. Générout, some twenty-five miles south of Saumur, dating

from the ninth or tenth century.¹ The façade and the transepts are gone, so that there is no indication of the original gable decoration. On the other hand, the exterior of the nave, a feature lacking in the baptistry at Poitiers, gives evidence that debased curved and triangular pediments were not restricted to façades in Merovingian architecture. For the ends of the round headed windows along the sides are crowned by a moulding supported on small projecting blocks (Fig. 4), and a series of triangles is introduced between the windows. There can be no doubt that this arched moulding is not in principle an archivolt extrados but rather a series of curved pediments of a rudimentary modillioned order, alternating with triangular pediments. In the latter the modillions are omitted, as in the pediment of the temple of Minerva at Assisi. Above the windows is a band of *opus reticulatum*; the diagonal stone work of Roman tradition being a form of decoration within the skill of these early builders. The church of Cravant near Chinon, also presumably of the ninth or tenth century, shows a treatment which is practically identical, almost the only difference being that the triangular pediments as well as the window heads are modillioned.²

For the next century of turmoil, civilization in travail has left no indication of its architecture; but we find, nevertheless, pediment traces again in the remains of the early eleventh century church of Cunault (Fig. 5).³ Here neither gables nor side walls are left, but there still exists a magnificent tower. Along the two upper stories are rows of round headed windows crowned with modillion bands, and squeezed in between the curved tops are chevrons, also of modillion bands. The windows are so close together that the chevron has no chance to be a full triangle as at St. Générout and Cravant, but if there were any question as to its origin, the presence of a background of diagonal stone work directly above each row of windows would conclusively prove

¹ *Archiv. de la Comm. des Mon. Hist.* II, pl. 2. The upper story of the gateway of the abbey of Lorsch, often assigned to this period, is evidently an imitation of a series of angular pediments supported on columns. Because of the uncertainty of the date of this structure and the fact that there seems to be nothing elsewhere at all closely related to it, I have omitted it from consideration in this paper. It certainly could not have influenced the architecture of western France.

² Lasteyrie, *op. cit.* p. 150, fig. 134.

³ On the left bank of the Loire 12 km. below Saumur. *Arch. de la Comm. des Mon. Hist.* II, pls. 9, 10.

legitimate descent. Only extreme dearth of architectural progress could have preserved a non-structural ornament with so little change for such a length of time. Should we assume that in this case the ornament has been transposed bodily from one position to another,—from clerestory arcade or transept ends to tower

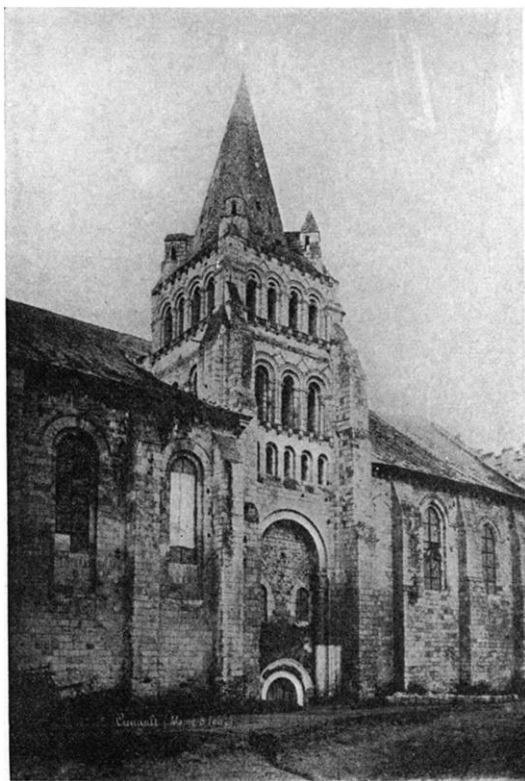


FIGURE 5.—ELEVENTH CENTURY CHURCH: CUNAUT.

walls,—or is it more probable that in the churches of the Roman-Frankish transition rudimentary applied orders were used wherever decoration was attempted, on towers as well as on walls and in gables? I think the latter is the more likely hypothesis.

The later architecture of this particular region, from Poitiers north to the Loire, shows few further traces of the classic pediment. The clerestory windows are too far apart for a continuous arcade treatment, as at St. Générout and Cravant, and transepts

are not found. The façades of Poitou often are crowded with rows of arches, blind or pierced with windows, but there are no chevrons. In the gable, however, of Ruffec,¹ to the south of Poitiers, is a carved Ascension sunk in a shallow niche. This niche is formed by lateral uprights supporting a chevron-shaped top. With the exception of the missing horizontal cornice mem-

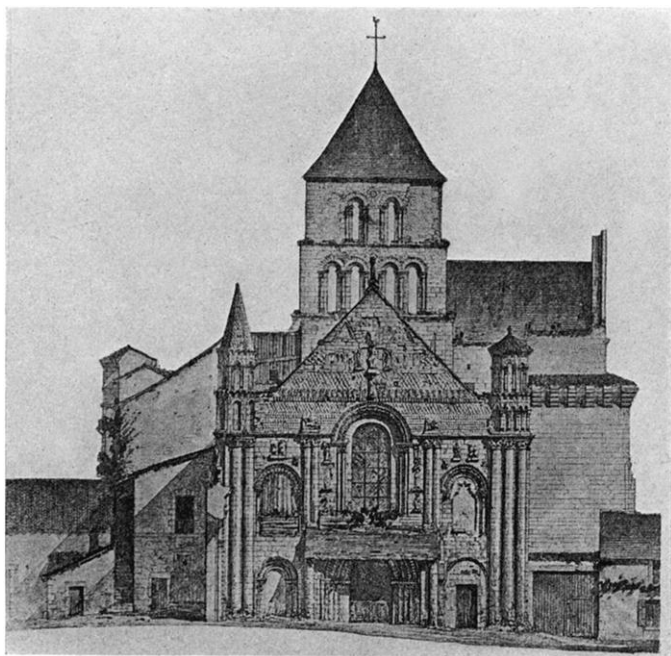


FIGURE 6.—ST. JOUIN DE MARNES: FRONT.

ber, the niche represents summarily all the elements of the Roman tabernacle,—pediment and supporting columns,—in their proper relations.

Another example is found to the north of Poitiers, almost half way to the Loire, on the sadly damaged church of St. Jouin de Marnes (Fig. 6).² In the gable here, are clear traces of two chev-

¹ Charente. The Ascension is a not uncommon motive for the decoration of Aquitainian gables. Cf. Poitiers, Notre Dame la Grande; Angoulême; Bordeaux.

² Deux Sevres. Twelfth Century. *Archiv. de la Comm. des Mon. Hist.* II, pls. 32, 33.

ron-topped tabernacles, flanking a central crucifixion. The background of the gable is filled with *opus reticulatum*, which, incidentally, is of quite general use throughout Poitou and Santonge.¹ The tower also of St. Jouin shows a curious remnant of the chevron. As at Cunault there are two stories of large arched openings, but instead of being continuous, each is divided by a wide central pier into two groups of two arches. In the lower story the haunches of each pair of arches are linked by a small semi-circle, evidently derived from the chevron, while in the central pier the semi-circle has become a complete ring. In the upper story this decorative circle is repeated, but the semi-circles are omitted.

A much fuller adherence to Merovingian tradition is shown by the churches of Auvergne. As this region was not at all intimately connected with that of Poitiers in the Middle Ages, it appears evident that the type of architecture of the baptistry there must have been at some time prevalent throughout all of Aquitania. The treatment on the inside of the walls of St. Jean de Poitiers, two arched niches separated by a chevron-topped niche, is duplicated constantly in Auvergne on the interior of the end walls of the transepts.² At Clermont the two arched niches are filled with windows, but usually all three are blind. Outside of Auvergne this transept decoration is found only in the church of St. Etienne at Nevers (Fig. 7), a building which in many ways suggests Auvergnat architecture though actually to the east of the Loire. The same chevron-topped niche appears again here on the outside of the transept wall, alternating with round-headed niches exactly as in the rows of pediments on late Roman sarcophagi.³

¹ Cf. Echillais and Aulnay, lateral archways of façade; Aulnay, lunettes of windows of apse; Poitiers, Notre Dame la Grande, gable, spandrils of tower and side walls; Ste. Redegonde and St. Porchaire, spandrils and lunettes of tower; St. Hilaire, spandrils of side walls and a band (perhaps restoration) around upper part of apse; Civray, spandrils of lateral arches of façade; Rétaud and Rioux, lower part of apse; Parçay-sur-Vienne, above doorways of façade; Nieuil-sur-l'Autise, bands in upper part of façade; even as far south as St. Emilion (Gironde), where there is a band above the arches in the second story of the tower (*Archiv. de la Comm. des Mon. Hist.* V, pl. 62). At Rivières (Indre-et-Loire) there is a curious band of continuous chevrons set in *opus reticulatum* across the apse wall, at mid height; there seems to be nothing of this sort anywhere else (Lasteyrie, *op. cit.* fig. 362).

² E.g. St. Nectaire, Orcival, Issoire, Ennezat.

³ A blind arcade consisting of engaged colonettes joined by alternate semi-circular arches and chevrons, in all respects like those at Nevers, occupied

But while these transept niches are the least changed expression of the Gallo-Roman decorative pediments, they are not by any means the only ones to be found in Auvergne. In the eleventh century church of St. Saturnin (Fig. 8)¹, the upper story of the nave is decorated with arches grouped in sets of threes, and spanning from set to set are chevrons, not so crowded as at Cunault nor yet full triangles as at St. Générout, but quite unmistakable. The same detail appears on the angles of the octagonal tower, connecting the groups of round-headed arches of the lower story

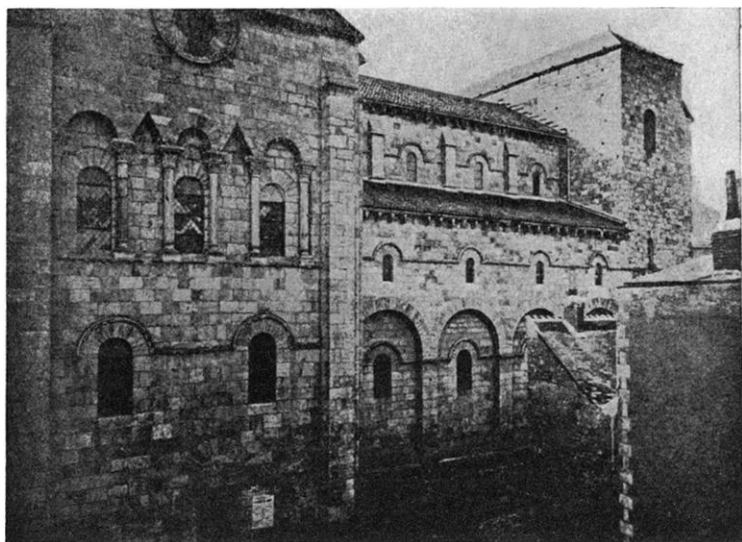


FIGURE 7.—CHURCH OF ST. ETIENNE: NEVERS.

there, and again on the rear face of the central mass above the crossing. In fact it is used wherever the spacing between round top arches permits of its proper development. It is curious, however, that St. Saturnin, the only example of typical Auvergnat architecture where chevrons appear upon the nave walls or the tower, is the only one where there are no chevron-topped niches on the inside of the transept walls.

the upper part of the south wall of the church of St. Demetrius at Salonica. Round-headed windows, not coming above the capitals of the colonettes, occur under the chevrons. The presence of this form in both east and west is no indication of artistic influence one way or the other, since in both places it develops naturally from a common origin.

¹ *Archiv. de la Comm. des Mon. Hist.* IV, pl. 78.

The nave façades of the churches of this region are usually unfinished, or occupied by central towers, the transepts, however, are not lacking in elaborate gable decorations, and here again are found reminiscences of pediment-topped tabernacles like those of the baptistery at Poitiers. At Notre Dame du Port in Clermont¹ the gable triangle shows a curious combination of angular lines. In the centre is an elongated rectangle surmounted by a triangle, —the tabernacle with its pediment. This is divided in two by a



FIGURE 8.—ST. SATURNIN: AUVERGNE.

central vertical line, and in each of the lower compartments so formed is a small chevron. The two flanking tabernacles, which at Poitiers were reduced to simple chevrons, have here become further simplified and have coalesced with the central motive in the form of half chevrons on either side of it. The resemblance of these geometric patterns to classic forms is not at first sight striking, and it might be reasonably questioned whether there were any connection between the two, were it not that the bands forming these Auvergnat gable decorations are all composed of the modillioned moulding, which we have seen to be the direct

¹ Gailhabaud, *op. cit.* II, pl. 48.

descendant of the Corinthian cornice. Moreover, the beautiful mosaic work of brick and vari-colored lavas in the gable is evidently an elaboration of the decorative brick and stone combinations found there in Merovingian times.

At Chauriat, also in Auvergne, the arrangement is somewhat different (Fig. 9). The horizontal member of the gable instead

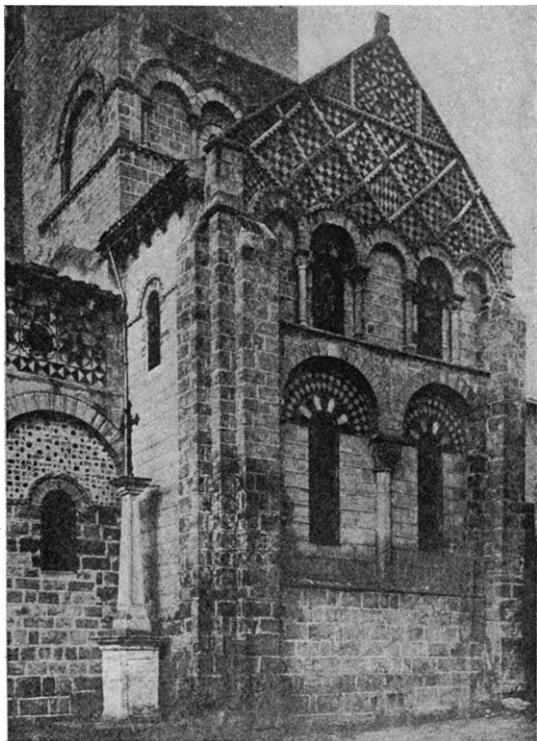


FIGURE 9.—CHURCH AT CHAURIAT.

of stretching from side to side at the level of the eaves, has been raised half way to the peak of the roof. As a consequence the tabernacle in the triangle above it consists only of the two vertical members, the sloping cornices of the whole roof forming the sloping cornices of the tabernacle. The space below the gable triangle is not left undecorated as at Clermont but is filled with three superposed rows of chevrons, the lowest row springing from the haunches of an arcade. The pattern thus formed seems to be

merely a series of intersecting diagonal lines, but the fact that these lines are often broken instead of running straight from end to end, shows that the builders considered their composition as being primarily composed of chevrons. The background for all this decoration is a vari-colored mosaic derived from the *opus reticulatum*, and the bands of the chevrons, tabernacle, and pediment consist of the modillioned moulding throughout.

Once started on a career of wholly meaningless gable decoration there is scarcely any limit to the designs these degenerate pediments may compose. At Issoire on the rear of the crossing and at the top of the central chapel we see two of which the origin could hardly be suspected were it not for the intermediate steps we have considered.¹

Furthest south of all, the façade of the old church of St. Front at Périgueux, built at the beginning of the eleventh century and now destroyed, presented a gable decorated on a large scale with intersecting diagonal lines.² Here again the fact that many of these lines were composed of modillioned bands proves that this is only a descendant of the gable pediments of Merovingian days. The original church has been so much rebuilt that it is impossible to say whether chevrons ever nestled between the arched heads of the nave windows along the sides.

The peculiar relationship between the decorative orders on the outside of St. Jean de Poitiers and the windows which they frame, which has already been noted (p. 58), occurs throughout Auvergne. Between the upper windows of the apses, and starting at the level of the spring of the window arches, small, purely decorative orders are regularly to be found (see Fig. 8)³. The pediments which might be expected above these orders have disappeared, lost in a wide frieze of elaborate mosaic. The same curious

¹ The gable of the transept at Issoire is filled with three blind arches borne on colonettes. The two side arches are round, the central one a trefoil. This arrangement may also be a reminiscence of a triple tabernacle such as was suggested in the baptistry at Poitiers, though the expression is wholly different from the pattern work in the gable at Clermont. St. Saturnin shows also three blind arches, but all three are alike. In the church of St. Genès at Thiers there are two round arched windows in the gable joined at their haunches by a small semi-circle which encloses a very curious rosette. The whole gable was originally filled with colored *opus reticulatum*, which was apparently not well built, for the present masonry is certainly a reconstruction. Cf. Lasteyrie, *op. cit.* fig. 461.

² de Verneille, *L'Arch. Byzantine en France*, pl. 8.

³ St. Nectaire, Orcival, Issoire, Clermont, St. Saturnin.

arrangement is also found along the upper part of the nave at the Cathedral of Le Puy.

If we turn our attention now to the north of the Loire, we find scarcely any architectural remains, and consequently no chevrons, before the middle of the eleventh century. But to make up for it, at that date the façade of the Cathedral of Le Mans presents a magnificent display (Fig. 10).¹ Chevrons starting from the

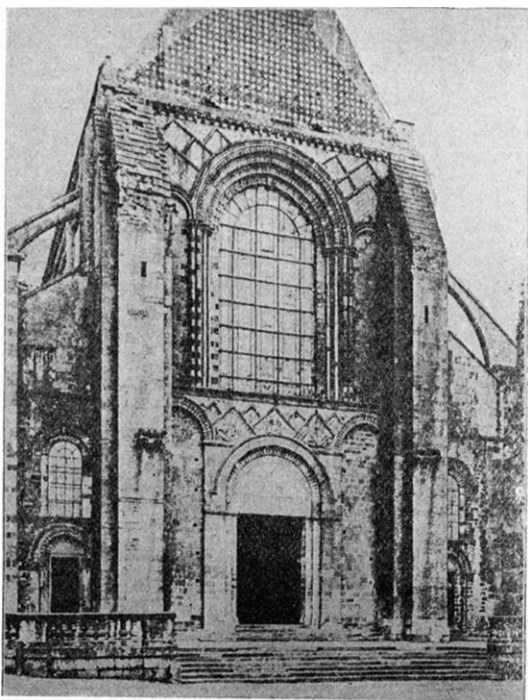


FIGURE 10.—CATHEDRAL OF LE MANS.

haunches of juxtaposed arches have multiplied with dizzying prolixity; their background is still the diagonal stone work of Roman times and the chevrons are still carefully modillioned. Curiously enough, while the gable is composed of *opus reticulatum* in color, it shows no trace of the Gallo-Roman tabernacle. The windows along the side are too far apart for chevrons to stretch between, even the modillioned band is absent from their archivolt, and the tower has long since disappeared. Following this third

¹ Lasteyrie, *op. cit.* fig. 228.

line north from Aquitaine into Normandy we find chevrons constantly used from the middle of the eleventh century through the twelfth and even occasionally in the thirteenth. The most suitable spot for their development seems to have been above the archivolt of coupled windows in the towers.¹ A peculiar variant is found on the twelfth century tower of St. Contest, near Caen, where chevrons have been placed like circumflex accents above the two arches flanking the central opening, apparently because these arches were too small to allow of the ordinary treatment (Fig. 11). Another variant is found on one side of the early twelfth century tower of Fontaine-la-Soret, where on the central pier between the arches of the two large openings is a small arched tabernacle framing a carved figure. The gables of the façades are sometimes decorated in imitation of mosaic work² but as at Le Mans there are no traces of pediments to be found there. The lower façades are usually

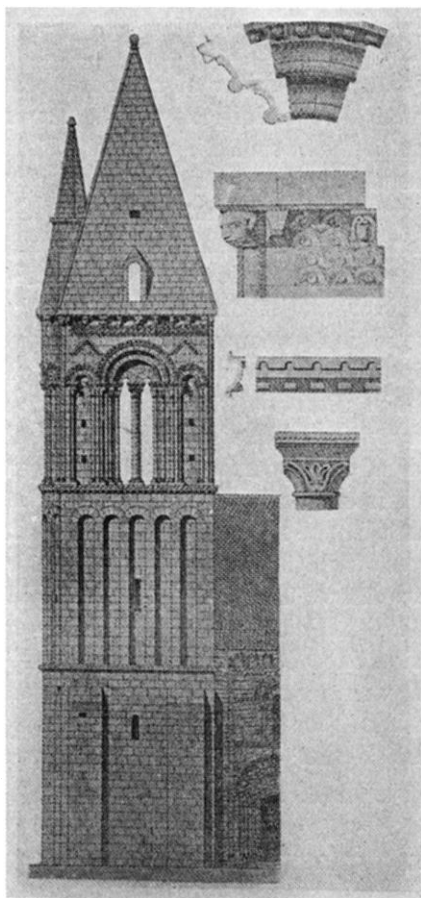


FIGURE 11.—TOWER OF ST. CONTEST.

¹ At Aizier, *ca.* 1040; Fontaine-la-Soret, *ca.* 1100; St. Contest, *ca.* 1130; Douvres, Falaise, and Caen (Abbaye aux Hommes) eleventh century, Caen (Abbaye aux Dames) twelfth century, chevrons are found above the arches at the top of the towers. See Ruprich-Robert, *L'Arch. normande aux XI et XII siècles*.

² Caen Abbaye aux Dames; Greville-St.-Honorine (transept). The Norman expression of *opus reticulatum* usually consists of a diaper pattern or "goffering" cut into the face of regularly coursed stone work (see below). It is widely used, especially in the tympana of arches.

severely plain or lean rather toward a Poitevin window treatment, but in one case, the twelfth century façade of the Abbaye aux Dames at Caen, the arches of the upper story are linked by chevrons. The side windows of the nave are too far apart for chevrons and are, moreover, separated by buttresses. Inside, however, at the Cathedral of Bayeux, the succession of juxtaposed arches of the nave arcade has been treated in a way strongly reminiscent of the tower arcades of Cunault.¹ The background is a diaper pattern formed, not of different colored lavas, for Normandy had none, but of stones with shallow carvings on the faces, and between each pair of arches is a little gable, sometimes a simple chevron, sometimes a full tabernacle with a modified modillioned moulding, sheltering a Norman grotesque.²

Norman architecture is certainly better known to English speaking students than that of the eleventh and twelfth centuries in any other section of France. For this reason the details we have been considering have here already received considerable attention. The modillioned moulding, consisting of a square member supported at intervals by small rounded blocks, has been christened the "billet-mould," being supposedly derived from small applied sections of wood. It is generally considered characteristically Norman, possibly originated by Scandinavian wood workers. The very close resemblance to the moulding of St. Jean de Poitiers can leave hardly any question that it is merely a simplified Corinthian cornice.³ The name chevron, too, has been applied primarily to the zig-zag treatment (also called the "*Baton rompu*" or "broken stick" ornament) so prevalent on Norman archivolts.⁴ The latter can be traced back to Carolingian archi-

¹ Lasteyrie, *op. cit.* fig. 346.

² Cf. Baum, *Romanesque Arch. in France*, p. 210.

³ Porter, *Mediaeval Architecture*, I, p. 163, states that the billet mould was introduced into France toward the very end of the Carolingian period. If by France he means the Royal Domain, I am inclined to think he sets his date too early; if on the other hand he means the modern area of France, it is evident that he has missed the significance of the mouldings at St. G  n  roux and St. Jean de Poitiers. Lasteyrie, *op. cit.* p. 574, suggests that the billet mould is derived from the classic dentil band, and while this is possible in some cases, it should be observed that the billet mould is most rare in the regions where classic dentils were most frequent, and that while the dentil and the band from which it hangs are regularly cut in one piece, the bands at St. G  n  roux are separate from the blocks which support them, exactly as in a modillioned cornice.

⁴ Bond, *Gothic Arch. in England*, p. 40, Prior, *Hist. of Gothic Arch. in England*, p. 118, and Lasteyrie, *op. cit.* p. 587 ff. use the word solely as a synonym for the

ture, and possibly originates even further back, but it is always an archivolt treatment. It has nothing in common with the detail we have been considering, except its angular form. The use of the name "chevron" or "triangle motive" for both indiscriminately is very confusing.

The story of the pediments in England is curious. Roman architecture in Britain was probably very similar to that in Gaul, though its remains are scarcer. Under barbarian rule it broke down as in France, producing an Anglo-Saxon decoration quite different from that south of the Channel but derived from the same Roman elements. The applied column, which disappeared in France, developed inordinately in England. The curved pediments assumed the form of blind arcades instead of window heads, while the angular pediments multiplied into strap work, much as in France. Mosaic stone work and the modillion band are not to be found, since they involved an elaboration of stone cutting beyond the ability of the Anglo-Saxons. The resultant surface decoration in vertical and intersecting lines is particularly marked on the towers of Barton-on-Humber and Earl's Barton (Fig. 12) which suggests very strongly that the towers of late Roman churches in Britain and probably also in Gaul were decorated with applied orders. This Anglo-Saxon decoration has been often considered to be derived from primitive half-timber construction.¹ Obviously such a theory is based on superficial appearance, not on archaeological research.

With the Norman conquest this native style was wholly replaced by that of the conquerors. But the French chevron did not cross

zig-zag moulding. Porter, *op. cit.* in general, uses the word in the same way, but he also considers it a form of the "Carolingian triangular motive" (Vol. I, p. 275) which was found at St. Jean de Poitiers, St. G  n  roux, St. Front de P  rigueux (p. 163) and which was re-echoed on the towers of St. Etienne (Abbaye aux Hommes) Caen, etc. (p. 275, note 3). As "chevron" really indicates the rafters of a gable, it seems to me eminently suitable to the ornament derived from a pediment, wherefore I have restricted it to that, perhaps not usual, meaning, preferring with Lasteyrie the term zig-zag for the continuous broken torus.

¹ Cf. Ferguson, *Hist. of Arch.* II, p. 9, and Power, *English Mediaeval Architecture*, Pt. 1, p. 50; and, on the other hand, Armstrong, *Art in Great Britain and Ireland*, pp. 18-19; Statham, *Short Critical Hist. of Arch.* p. 307, and Fletcher, *Hist. of Arch.* p. 327. Simpson, *Hist. of Arch. Development*, II, pp. 235-236, asserts that this Anglo-Saxon surface decoration was imported from Lombardy, direct or via Germany. Jackson, *Byzantine and Romanesque Arch.* II, p. 193, admits the possibility of this hypothesis. To me it seems not only quite unnecessary but highly improbable.

the Channel with the Normans; instead its course turned eastward and one late *vagrant* example is to be found, very unostentatious but still unmistakable, between the tower arches of St. Denis. This abbey, rebuilt by Suger in 1140-1144, has been justly called the first Gothic building, for its architect showed a vision and mastery of the new methods of construction far beyond that of the hesitant experimenters who had preceded him. With the rapid revolution which changed the whole appearance of Northern French architecture in the last half of the twelfth century, the

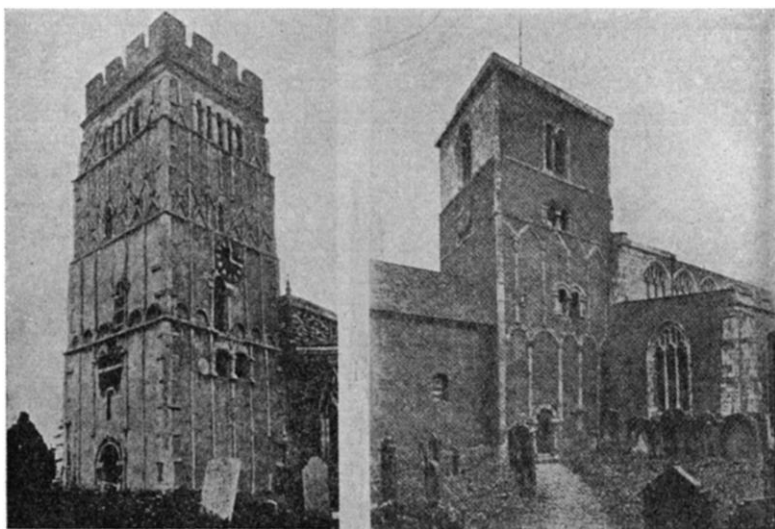


FIGURE 12.—CHURCHES AT EARL'S BARTON AND BARTON-ON-HUMBER.

chevron drops out of sight, except in backward Normandy. It may be, though, that it does not truly die, but rather is transformed into an element which lasts throughout the Gothic age to the reintroduction of the classic pediment by the Renaissance.

The steps of this possible transformation can only be sketched and not clearly shown, for the changes of those years were so amazingly rapid and the region where they occurred has been so continually devastated, from the hundred years war to the present day, that the multiple evidences seen further west in Romanesque development, are not to be found here.

The first hypothetical change which I would suggest would be that the chevron, being wholly meaningless to the tradition-break-

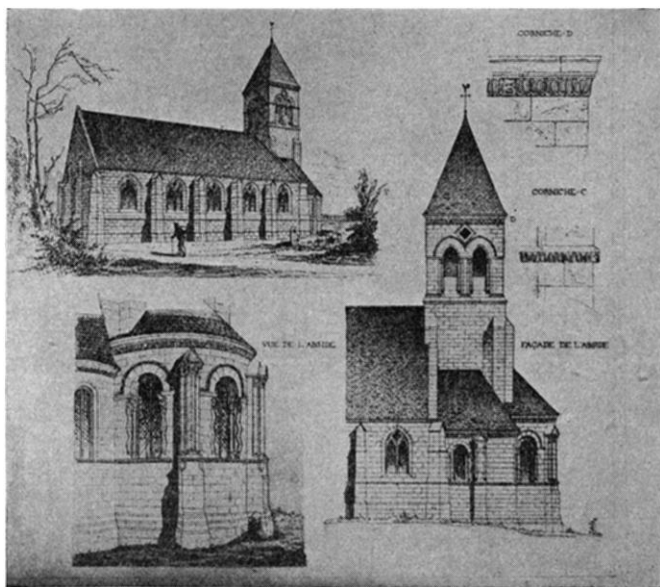


FIGURE 13.—THE CHURCH AT CHELLES.

ing Gothic builders, except as decoration, became a lozenge (Fig. 13).¹ This lozenge was a complete decorative form and filled well the spandril between coupled pointed arches; but still it

¹ In the tower of Chelles (Oise), *Archiv. de la Comm. des Mon. Hist.* I, pl. 7, the lozenge is apparently pierced, but whether this is due to a restoration or was the original state, I cannot say. There are similar pierced lozenges between the pointed arches of the Cloister at Moissac. While these may have been developed from the chevron, it is difficult to trace any sure connection. Quite possibly they were merely a chance ornament suggested by the shape of the spandril they fill, which of course may also be the case at Chelles. The brick architecture of Toulouse not far to the south frequently employs lozenge-shaped windows, but I doubt very much if these are derived from the Gallo-Roman pediment. In the tower of St. Sernin these angular openings occur in the upper stories while the lower stories have round-topped openings, from which it seems probable that this peculiar form is a later invention rather than an ancient tradition. The church of the Jacobins (late thirteenth century) and of Le Taur (fourteenth to fifteenth centuries) at Toulouse and the neighboring church of the Isle d'Albi (fourteenth century) are all rich in angular brick openings (*Archiv. d. Mon. Hist.* V). Were it not that the chevron-shape arcades of the tower of Mauriac (Cantal, Lasteyrie, *op. cit.* fig. 464, rebuilt in 1843) might indicate connection between Auvergnat towers and those of Languedoc, I should unhesitatingly class the Toulousian lozenges and chevrons as a local development of the latter part of the thirteenth century probably due to the use of brick construction.

seemed unnecessarily severe. The next change, therefore, was to a circle or a four petalled rosette, still for no purpose except ornament. Or it is possible that the circle developed from a curved chevron as on the tower of Cunault without the intervention of the lozenge. First used, presumably, on coupled tower windows, it was quickly applied to the arcades of triforium galleries,—the only other place where coupled arches under an enclosing arch leave a bare spandril above. Here, for the sake of lightness, the rosette was pierced clear through instead of being merely surface cut.¹ Then, back in the tower windows again, we find the rosette, first merely pierced and finally glazed.

Up to this time clerestory windows had been simple single lights, one to a bay, but with the growing demand for glass area the coupled arches of triforium and tower were quickly introduced. The pierced rosette expanded here, became complicated, at Chartres almost swamped the two lights beneath, finally it coalesced with them, changing from a group of plate tracery lights to a single line tracery window.² In this form the rosette can be plainly seen above the two pointed window arches all through the middle ages, and from it springs that whole development of elaborate lacework that forms one of the chief charms of Gothic art.

Up to the thirteenth century doors had been simple arches cut in solid walls; now there were built in front of them porches which had perforce to be sheltered with sloping roofs. Here, then, at last we find a feature resembling in form, and identical in function, with the classic pedimented portico from which we started. But archaeologically there is no connection whatever; the ancient architectural function has merely re-expressed itself in a similar form. The true descendant of the classic pediment is the tracery in the windows above.

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¹ *E.g.* St. Germer (Oise) *ca.* 1140.

² Moore, *Gothic Architecture*, pp. 155 ff. implies that the compound window is derived from late Byzantine forms. In view of the absence of any connecting links, such a remote origin seems to me dubious to say the least.